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It was the purpose of this study to investigate and compare the expectations of the school for the child and the expectations based on research findings from the field of child growth and development and to discover the nature of the discrepancy, if any, between these two expectations. Data was gathered for comparing the evaluations of early elementary education teachers and child growth and development specialists on the eye-hand coordination skill of 104 kindergarten children. It was found that the expectations of the teachers were higher than those of the specialists. The number of years of the teachers' formal education or teaching experience were not significant factors in determining this high expectation. Perhaps the discrepancy between the two groups can be partially explained by the surrendering of teachers to the pressures of academic acceleration. The teachers in this study, although representing three grade levels (kindergarten, first, and second), agreed consistently among themselves on the proper level of the children's performance, but all tended to rate that performance negatively. (WD)

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INGHAM INTERMEDIATE COOPERATIVE RESEARCH PROJECT
1967-68

Project Director:
Jane Scandary

A Study of Early Elementary Teacher Evaluations of Selected Eye-Hand Coordination Skills of Kindergarten Children

Summary Report:

Two forces have created concerns, on the part of researchers in Child Growth and Development, for the educational and emotional welfare of the early elementary school child. Societal circumstances appear to be creating pressures on the educational institutions of this country to accelerate the learner and his academic achievements. Commensurate with these pressures for educational acceleration has been an impetus for the early identification of the child who may not be able to keep up this academic pace. It was the purpose of this study to investigate the extent to which some of the expectations of the school compared with similar expectations based on research findings from the field of Child Growth and Development, and to discover the nature of the discrepancy between these two expectations, if such existed.

The eye-hand coordination skill development of Kindergarten children was selected as a focus point for this investigation. Three school-related eye-hand coordination tasks which had been normed on large groups of Kindergarten-age children were selected for use in this project; Gesell's Copy Forms and the Ten-Dot Gestalt and Sentence Gestalt sub-tests of the Anton

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Brenner Developmental Gestalt Test for School Readiness. Samples of these tasks were gathered from 104 Kindergarten children within the Ingham Intermediate School District (excluding the City of Lansing) during the spring of 1967. These samples were independently evaluated by three experienced School Diagnosticians according to criteria established by authorities in Child Growth and Development. Fifteen samples of each of the three tasks, representing a full range of performance ability, were randomly selected and reproduced for presentation to teachers for their evaluation. One Kindergarten teacher, one First grade teacher and one Second Grade teacher from each of the 37 elementary schools within the Ingham Intermediate District were randomly selected to evaluate these samples of children's work. The same samples were evaluated by the same teachers during October and May of the 1967-68 school year. These evaluations were analyzed for differences between the grade levels, teaching experience at grade level, and academic training represented within the teacher group. The teacher evaluations were then compared with the evaluations of the children's work derived from specialists in Child Growth and Development. Where discrepancies in the evaluations of these two groups existed, the nature of the discrepancies were noted.

Conclusions:

Within the limitations imposed on this investigation and defined in Chapter I, the following conclusions appear to be justified:

1. Early elementary classroom teachers do not agree with Child Growth and Development specialists in their evaluations of the eye-hand coordination skill development of Kindergarten children.

Agreement on the evaluation of these skills between the teachers and specialists was less than 50 percent. The composite Mean percentage of agreement, over the two evaluation periods, ranged from 41 percent on the Copy Dots task to 49.9 per cent on the Copy Sentence task.

2. Kindergarten, First and Second Grade teachers are consistent within themselves in their evaluations of eye-hand coordination skills, inferring a uniform standard of evaluation within themselves and/or the educational establishment. The factor of grade level differences was tested by the Chi-Square Test of Significance and found not significant at the .05 level. Less than a 4 per cent difference existed between the evaluations of the three grade level groups. This small degree of difference between grade level evaluations was consistent on all three tasks.

3. The extent of formal education and teaching experience appear to have no relationship to the degree in which early elementary teacher evaluations agree with specialists on the eye-hand coordination skills of Kindergarten children. The variables of years of teaching experience at grade level and academic training were tested by the Chi Square Test of Significance and found not significant at the .05 level.

4. Early elementary teachers have a tendency to evaluate negatively the performance abilities of Kindergarten children on eye-hand coordination tasks. Where disagreement existed between the teacher evaluations and those of the specialists, the percentage of teacher responses which under-rated children's performances

ranged from 18.5 per cent on the Copy Dot task to 45.1 per cent on the Copy Form task with a composite Mean (over all tasks on both evaluation periods) of 29.6 per cent. The percentage of teacher responses which rated performance above the specialists' ratings ranged from 7.8 per cent on the Copy Form task to 38.9 on the Copy Dot task, with a composite Mean of 23.2 per cent.

5. Kindergarten teachers show a tendency to evaluate negatively the performance abilities of Kindergarten children on eye-hand coordination tasks more frequently than do First and Second Grade teachers. Kindergarten teachers showed a higher percentage of under-rating of children's performance on all tasks during both evaluation periods, with the exception of the Copy Dot task in the October evaluation period, when did teachers of the first and second grades. Kindergarten teachers showed an increase in the number of under-ratings (negative evaluations) over time. First and Second grade teachers showed a decrease in the number of under-rated performance over time.

6. Over time the teacher evaluations on these eye-hand coordination skills showed a decrease in the number of ratings at either end of the performance scale ("High" and "Unacceptable"), inferring a greater clustering around some expected or uniform standard of their own devising. The number of "Unacceptable" performance ratings dropped from 273 in the October evaluation period to 235 in the May evaluation. The number of "High" performance ratings dropped from 225 in the October evaluation period to 199 in the May evaluation.

Educational Implications and Discussion:

The data gathered from this investigation comparing the evaluations of early elementary teachers and Child Growth and Development specialists on the eye-hand coordination skill development of Kindergarten children appears to have possible implications for several facets of the educational process.

Research has established, fairly conclusively, that the ability to coordinate a visual stimuli with a motor response is a developmental skill, culminating generally at eight to ten years of age. This particular aspect of child development is not a new nor recent finding as indicated by Gesell's early work and publications in this area. The results of this investigation indicate that the expectations of the teacher and the school concerning the eye-hand coordination ability of these Kindergarten children appear higher than might be expected if the research on this skill development from Child Growth and Development specialists were used as a criteria. It is difficult to ascertain whether the wide discrepancy between the way in which teachers evaluate these skills, as compared to the specialist's evaluations, is due to lack of information concerning the developmental aspects of this ability, or due to their succumbance to the various societal influences which are pressuring for academic acceleration.

This study indicated that neither the number of years of formal education nor the number of years of teaching experience at present grade level were significant factors in the way in which teachers evaluated the performance abilities of these children. Thus, it cannot be assumed that education courses, per se, nor teaching experience will automatically

produce educators knowledgable in the various areas of study concerned with how children grow and learn. If it can be assumed that lack of information is a factor in the way in which these teachers evaluated these developmental skills, then it would appear that there is need for more and/or better experiences in the study of Child Growth and Development at the teacher education level. Deliberate focus on and a application of these knowledges appear to be essential in both the pre-teaching and in-service teacher education programs.

A second implication, as the result of this study, has to do with the role of the educator in our society. If the assumption can be made that the wide discrepancy between the evaluations of the teachers and specialists is due, at least in part, to a surrendering to the pressures of academic acceleration on the part of the teacher, then some discussion concerning the role and influence of the teacher in our society appears relevant. Hilda Taba, in her 1964 ASCD Convention address[55], pointed out three broad areas of educational committment; to perpetuate the culture, to advance the culture, and to serve as a "counter-vailing force" against those pressures which would be harmful to human development within that culture. She states that the educator has been primarily concerned with his role in the first committment, is becoming more concerned with his role in the second committment, and generally, has not seen himself as having a role in the third committment. The swift technological advancements of our current society have created this new role function for educators. To stand firm in the face of

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[55]Hilda Taba, "The Child in a Technological Society," Tape Recording. 20th Annual Conference of the Association for Supervision and Curriculum Development, Denver, March 1964

national and community pressures, to serve as a protectorate of the welfare of children as well as an advocate of appropriate progress requires the use of the best available knowledges concerning all facets of education, and particularly that which relates to the child himself---how he grows and learns. Furthermore, these knowledges and their relationship to the school curriculum must be extended into the home and community by the educator. Archibald MacLeish, in his article "The Great American Frustration,"[56] appears to substantiate Taba's argument by saying that the educator today is behaving as a "consumer" of a technological society, responding mechanically to established educational functions and standards with a fatalistic attitude concerning man's future ability to exert any influence or control over his own destiny. MacLeish further states that it is the educator, above all others, who has the knowledges (or should have) and the opportunity to become the "pioneer" or "shaper" of a humanitarian culture. These new demands upon the role and function of educators require competencies in the area of knowledges (Child Growth and Development) with which this study has been concerned.

The results of this investigation indicated that although these early elementary teachers did not agree with the specialists on their evaluations of the eye-hand coordination skills of Kindergarten children, They did agree almost completely among themselves. This finding appears to imply either a mutually-perceived performance standard that has developed within themselves as a group, or an institutional expectation

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[56]Archibald MacLeish, "The Great American Frustration," Saturday Review, July 13, 1968, p. 13-16

to which they are mutually adhering. Warner, in his studies concerning the disadvantages faced by the lower-class child when competing academically with children from the middle class, feels that both the teacher and the school are significant factors in evaluative judgements. He states;

> "The teacher's judgements of children and of standards of performance are inevitably based upon their own personal standards, buttressed by those set by the school as an institution."[57]

The teachers involved within this study represented three different grade levels, in 37 different elementary school settings within 11 different school districts of the Ingham Intermediate District, yet the evaluation standards of these teachers were surprisingly uniform. What, then, might be the possible sources or bases for this uniformity of evaluation?

Hurlock mentions, as quoted in Chapter II, that children's performance skills are too frequently evaluated on the basis of perfected performance abilities as perceived and accomplished by adults. It might also be assumed that another possible source of these uniform performance standards lies in the generally accepted published materials and teaching methods utilized within the schools of this area. Textbooks, workbooks, and teaching activities requiring the use of specific skills might imply to the classroom teacher that such skill development is normal and to be expected for a particular age/grade child. Whether this implication is valid or not, the teacher or school may incorporate this performance expectation within

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[57]W.L. Warner, American Life: Dream and Reality, Chicago, University of Chicago Press, 1953, p. 177

their own performance standards and, thus, develop or strengthen both uniform personal and institutional evaluation standards. As the materials and methods used within the school districts involved in this study are little different from those accepted for use throughout the state and nation, it is conceivable that the evaluations of these early elementary teachers concerning the eye-hand coordination skill development of Kindergarten children might reflect similar evaluations or performance expectations of a broader teacher population than the one tested here. If the data collected and analyzed within the limitations of this study reflect, (with a degree of reliability) the way in which teachers generally evaluate the eye-hand coordination skills of Kindergarten children, and if these evaluations represent a level or standard of judgement which may be similar to those of a larger teacher population, what implications does this have for a multitude of early school learners?

The results of the present investigation indicated that where there was a discrepancy between the evaluations of teachers and specialists, the direction of disagreement tended to be one of under-rating or negatively evaluating the child's performance on the part of the teacher. Kindergarten teachers showed the highest percentage of negative evaluations among the three teacher groups. It is understood that eye-hand coordination tasks at this age/grade level account for only a portion of the activities upon which a Kindergarten child is evaluated, however, the fact that these activities are considered important enough to be included, in one form or another, in most reliable school readiness and mental maturity tests indicates their relationship to learning ability and academic success. Although the selected tasks used for comparative purposes within this study are limited in number, these kinds of activities are considered

to be highly significant in a teacher's total evaluation of a child's abilities within the school setting. Thus, if the teacher or school performance standards for these tasks are higher than standards based on research findings from Child Growth and Development specialists, the cut-off point between what is perceived as being "Acceptable" and "Unacceptable" performance in these skills will unjustly affect a large group of children.

Reviewing the findings of the present research investigation from the viewpoint of its relationship to the above information, it is very possible that a large number of children who might otherwise be perceived as performing within the normal or acceptable range of ability on these eye-hand coordination tasks are being under-rated and, consequently, found (consciously or unconsciously) less acceptable by the teacher. Research studies, previously reported, indicate that the attitudes of the teacher toward the child and his performance ability can make significant differences in the way in which the child comes to perceive himself as a person and a learner. These studies also show a positive correlation between an accepting attitude on the part of the teacher and a positive self-concept on the part of the child. Several studies further indicate that where performance is not "up to expectation" the kind of attention given the child by the teacher can have derogatory effects upon future learning experiences of the child. Allinsmith and Goethals, in their report of the findings of the Joint Commission on Mental Illness and Health, found that when a student presented problems to the school or challenged its pre-conceived standards or functions some kind of action

seemed to be required. They add;

> "Action is most usually desired from pressures on the child to change his behavior rather than on teachers to change their behavior.....The first step is often to segregate the pupil through separate classes, separate schools or separate periods of special instruction."[58]

With the current impetus on the early identification of the child with "learning disabilities" or "potential disabilities" it is conceivable that a portion of the children represented in the present study, may be erroniously labeled and referred for special attention by these classroom teachers. This can be a humiliating and dehabilitating experience for the beginning school child. Dinkmeyer re-enforces this point by saying;

> "Because of the potency of the desire to be accepted as a participating member of the group, it is a painful experience for any child to feel inferior or unacceptable. Such feelings restrict the development of social interest and have a negative effect on the formation of the self-concept."[59]

It may be speculated that either because of a lack of specific knowledge on the part of classroom teachers, concerning how children grow and learn, or a turning of the mind away from the utilization of these knowledges in the face of societal pressures, many children are possibly being confronted with unnecessary feelings of academic failure and unaccepting attitudes within their first year of educational experience.

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[58] W. Allinsmithe and G.W. Goethals, The Role of Schools in Mental Health, (Joint Commission on Mental Illness and Health), New York, Basic Books, Inc., Publishers, 1962, p. 39

[59] Don C. Dinkmeyer, Child Development: The Emerging Self, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1965, p. 208